09-24-04 DT10 Rec'd PCT/PTO 23 SEP 2004

| FORM PTO<br>(REV. 10-2  |   | MENT OF COMMERCE PATENT AND TRADEMARK OFFICE                                   | ATTORNEY'S DOCKET NUMBER 2002P84041WOUS            |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|--|
|   | TRANSMITTAL LETTI   | U.S. APPLICATION NO. (If Known, see 37 CFR1.5                                  |  |  |  |  |  |  |  |
| DESIGNATED/ELECTED OFFICE (DO/EO/LIS)   |   |  |  |  |  |  |  |  |  |
| CONCERNING A FILING UNDER 35 U.S.C. 371   |   |  |  |  |  |  |  |  |  |
| INTERNA   | TIONAL APPLICATION NO.  | PRIORITY DATE CLAIMED  |  |  |  |  |  |  |  |
|   | PCT/GB03/01321  | March 21,03002 E   |  |  |  |  |  |  |  |
| TITLE OF INVENTION .  |   |  |  |  |  |  |  |  |  |
| IMPINGEMENT COOLING OF GAS TURBINE BLADES OR VANES  CON 7 2 2006 W  |   |  |  |  |  |  |  |  |  |
| APPLICANT(S) FOR DO/EO/US  Christenher Cross  |   |  |  |  |  |  |  |  |  |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: |   |  |  |  |  |  |  |  |  |
| 1. X  | X This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.  |  |  |  |  |  |  |  |  |
| 2.  | This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.   |  |  |  |  |  |  |  |  |
| 3.  | This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. |  |  |  |  |  |  |  |  |
| 4. X  | The US has been elected (Article  | 31).   |  |  |  |  |  |  |  |
| 5. X  | A copy of the International Application as filed (35 U.S.C. 371(c)(2))  |  |  |  |  |  |  |  |  |
|   | a. X is attached hereto (required only if not communicated by the International Bureau).  |  |  |  |  |  |  |  |  |
|   | b. has been communicated by the International Bureau.   |  |  |  |  |  |  |  |  |
|   | c. is not required, as the application was filed in the United States Receiving Office (RO/US).   |  |  |  |  |  |  |  |  |
| 6.  | An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)).   |  |  |  |  |  |  |  |  |
|   | a. is attached hereto.  |  |  |  |  |  |  |  |  |
|   | b. has been previously  | submitted under 35 U.S.C. 154 (d)(4).  |  |  |  |  |  |  |  |
| 7.  | Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))  |  |  |  |  |  |  |  |  |
|   | a. are attached hereto (required only if not communicated by the International Bureau).   |  |  |  |  |  |  |  |  |
|   | b. have been communicated by the International Bureau.  |  |  |  |  |  |  |  |  |
|   | c. have not been made; however, the time limit for making such amendments has NOT expired.  |  |  |  |  |  |  |  |  |
|   | d. have not been made and will not be made.   |  |  |  |  |  |  |  |  |
| 8.  | An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).  |  |  |  |  |  |  |  |  |
| 9. X  | An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)). UNSIGNED  |  |  |  |  |  |  |  |  |
| 10.   | An English language translation of Article 36 (35 U.S.C. 371(c)(5)).  | of the annexes of the International Preliminary Examina                        | ation Report under PCT                             |  |  |  |  |  |  |
| Items 11 to 20 below concern document(s) or information included:   |   |  |  |  |  |  |  |  |  |
| 11. X   | An Information Disclosure Staten  |  |  |  |  |  |  |  |  |
| 12.   | An assignment document for reco   | rding. A separate cover sheet in compliance with 37 C                          | CFR 3.28 and 3.31 is included.                     |  |  |  |  |  |  |
| 13. X   | A preliminary amendment.  |  |  |  |  |  |  |  |  |
| 14.   | An Application Data Sheet under   | 37 CFR 1.76.   |  |  |  |  |  |  |  |
| 15. X   | A substitute specification.   |  |  |  |  |  |  |  |  |
| 16.   | A power of attorney and/or chang  | e of address letter.   |  |  |  |  |  |  |  |
| 17.   | A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.  |  |  |  |  |  |  |  |  |
| 18.   | A second copy of the published international application 35 U.S.C. 154(d)(4).   |  |  |  |  |  |  |  |  |
| 19.   | A second copy of the English lang   | guage translation of the international application under                       | 35 U.S.C. 154(d)(4).                               |  |  |  |  |  |  |
| 20. X   | Other items or information: (a) FORT  | RETURN RECEIPT POSTCARD; (b) A POWER OF AGE OF PCT APPLICATION PCT/GB03/01321; | F ATTORNEY IS INCLUDED IN (d) INTERNATIONAL SEARCH |  |  |  |  |  |  |
|   |   |  |  |  |  |  |  |  |  |

| U.S. APPLICATION NO. (if known, see 37 CFR 1.5)  10/500474   |   | INTERNATIONAL APPLIATION NO. PCT/GB03/01321  |                            | ATTY. DOCKET NO. 2002P84041WOUS |                     |  |  |  |
|--|---|--|----------------------------|---------------------------------|---------------------|--|--|--|
| 21. X The following  | g fees are submitted:                         | CALCULATIONS PTO USE ONLY  |                            |                                 |                     |  |  |  |
| BASIC NATIONAL I<br>Neither international pr<br>nor international search<br>and International Search   |   |  |                            |                                 |                     |  |  |  |
| International prelimination USPTO but Internation  |   |  |                            |                                 |                     |  |  |  |
| International preliminal but international search  |   |  |                            |                                 |                     |  |  |  |
| International preliminar but all claims did not sa   |   |  |                            |                                 |                     |  |  |  |
| and all claims satisfied   | provisions of PCT A                           | 7 CFR 1.482) paid to USPTO rticle 33(1)-(4)  |                            |                                 |                     |  |  |  |
|  |   | ATE BASIC FEE AMOUNT   |                            | \$ 920.00                       |                     |  |  |  |
| from the earliest claime   | or furnishing the oath                        | or declaration later than 30 m FR 1.492(e)).   | onths                      | \$                              |                     |  |  |  |
| CLAIMS   | NUMBER FILEI                                  | The state of the s | RATE                       | \$                              |                     |  |  |  |
| Total Claims   | 9 - 20 :                                      |  | x \$18.00                  | \$                              |                     |  |  |  |
| Independent claims   | 1 - 3   | =  | x \$86.00                  | \$                              |                     |  |  |  |
| MULTIPLE DEPENDI   | ENT CLAIMS(S) (if                             |  | + \$290.00                 | \$                              |                     |  |  |  |
|  |   | TOTAL OF ABOVE   | CALCULATIONS =             | \$                              |                     |  |  |  |
| Applicant claims are reduced by 1  | s small entity status.                        | \$   |                            |                                 |                     |  |  |  |
|  |   | \$ 920.00  |                            |                                 |                     |  |  |  |
| Processing fee of \$130. from the earliest claime  |   | \$   |                            |                                 |                     |  |  |  |
| Fee for recording the er   | iclosed assignment (3                         | \$   |                            |                                 |                     |  |  |  |
| by an appropriate cover  |   | \$ 920.00  |                            |                                 |                     |  |  |  |
|  |   | TOTAL  | FEES ENCLOSED =            | Amount to be                    | \$                  |  |  |  |
|  |   |  |                            | refunded:                       |                     |  |  |  |
|  |   |  |                            | charged:                        | \$                  |  |  |  |
| <ul> <li>a. A check in the amount of \$ to cover the above fees is enclosed.</li> <li>b. X Please charge my Deposit Account No. 19-2179 in the amount of \$ 920.00 to cover the above fees.</li> </ul>   |   |  |                            |                                 |                     |  |  |  |
| <ul> <li>b. X Please charge my Deposit Account No. 19-2179 in the amount of \$ 920.00 to cover the above fees. A duplicate copy of this sheet is enclosed.</li> <li>c. X The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any</li> </ul> |   |  |                            |                                 |                     |  |  |  |
| overpayment to Deposit Account No. 19-2179 . A duplicate copy of this sheet is enclosed.   |   |  |                            |                                 |                     |  |  |  |
|  |   | rd. WARNING: Information ed on this form. Provide credi  |                            |                                 |                     |  |  |  |
| NOTE: Where an app filed and granted to re   | propriate time limit<br>store the application | under 37 CFR 1.495 has not not to pending status.  | been met, a petition to re | evive (37 CFR 1.137             | (a) or (b)) must be |  |  |  |
| SEND ALL CORRESP   | Muco  |  |                            |                                 |                     |  |  |  |
| Siemens Corporation  | ЛЕ  |  |                            |                                 |                     |  |  |  |
| Intellectual Property I  |   | ot. 23, 2004   |                            |                                 |                     |  |  |  |
| 170 Wood Avenue Sou<br>Iselin, NJ 08830  | 107-736-6449                                  | DATE   |                            |                                 |                     |  |  |  |
| 732-321-3026   |   | 44,961<br>ATION NUMBER   |                            |                                 |                     |  |  |  |
|  |   |  |                            |                                 |                     |  |  |  |
|  |   |  | -                          |                                 |                     |  |  |  |
|  |   |  |                            |                                 |                     |  |  |  |